IN THE CLAIMS

Claims 1-2 (cancelled).

Claim 3 (currently amended). A device for moving fluids through a microfluidic channel, comprising:

a microfluidic channel having an inlet and an outlet;

a fluid contained within said channel;

and an absorbent material having a triangular shape coupled to said outlet of said channel,

whereby when said fluid within said channel initially contacts said absorbent material, a driving force is created which moves said fluid through said channel to said outlet, wherein said fluid creates [a] an expanding moving fluid front across said triangular absorbent material as said fluid contacts said material [and said absorbent material is shaped such that the flow speed of said moving fluid front across said material is controlled by the shape of the material], thus increasing the driving force within said channel as fluid moves through said channel.

Claims 4-5 (cancelled).

Claim 6 (currently amended). A device for providing a continuous flow within a microfluidic channel when using gravitational force as a driving source, comprising:

a fluid reservoir having a top surface and a bottom surface, and vent means for relieving pressure within said reservoir;

a first microfluidic channel connected to said reservoir;

a driving source, comprising gravitational force;

and a first passageway for coupling said first channel to said reservoir at a position between said top surface and said bottom surface, said first passageway having a first dimension along said reservoir and a second dimension perpendicular to said reservoir,

wherein said first [passageway] dimension is sized such that fluid driven by said gravitational force entering said reservoir from said first channel overcomes any surface tension of said fluid and flows into said reservoir in a smooth, continuous stream.

Claim 7 (currently amended). A device for providing a visual indication of the concentration of an analyte in a microfluidic channel, comprising:

a microfluidic detection channel having an inlet and an outlet;

an indicator channel coupled to said detection channel at said inlet;

a sample channel coupled to said detection channel at said inlet opposite said indicator channel;

a first fluid introduced through said indicator channel into said detection channel;

a second fluid introduced through said sample channel into said detection channel toward said outlet;

a window for viewing the fluids flowing within said detection channel;

and [indicating means,] a template containing indicia representative of second fluid concentration within said detection channel, located in proximity to said detection channel,

wherein when said first and second fluids flow within said detection channel toward said outlet, a diffusion pattern is formed indicative of the concentration of said second fluid within said detection channel, such that the diffusion pattern may be compared to said [indicating means] indicia on said template to determine concentration within said detection channel.

Claim 8 (cancelled).

Claim 9. (currently amended) A microfluidic device for joining two [or more fluid] liquid streams when using gravitational force as a driving source, comprising:

a first reservoir for containing a first liquid, having a first outlet orifice;

a first channel having [an] a first inlet opening coupled to said first orifice and [an] a first outlet opening;

a second reservoir for containing a second liquid, having a second outlet orifice;

a second channel having [an] a second inlet opening coupled to said second orifice and [an] a second outlet opening;

a driving source, comprising gravitational force;

and a main microfluidic channel having an inlet coupling region for coupling said outlet openings of said first and second channels to said main channel, said inlet coupling region having a greater width than said main channel,

[wherein said coupling region is sized] such that liquid [fluid] driven by said gravitational force entering said coupling region from [either] one of said first or second reservoirs through said channel outlet openings [enters] flows into said main microfluidic channel without trapping an air bubble within said other channel and blocking said outlet opening of said other channel.

Claim 10 (cancelled).

Claim 11 (cancelled).

Claim 12 (cancelled).

Claim 13 (amended). The device of claim [12] 9, wherein said inlet openings of said first and second channels comprise surface tension valves.

Claim 14 (original). The device of claim 13, wherein the static resistance of said surface tension valves is lower than the dynamic resistance within said first and second channels.

Claim 15 (cancelled).

Claim 16 (cancelled).